

ABSTRACT

A micro-electromechanical liquid ejection device includes a substrate that incorporates drive circuitry. Nozzle chamber walls are positioned on the substrate to define a nozzle chamber. The nozzle chamber walls include a roof wall that defines an ejection port in fluid communication with the nozzle chamber. The substrate defines an inlet passage through the substrate and into the nozzle chamber. An elongate drive member is fast with the substrate at a fixed end and incorporates an electrical circuit that is in electrical contact with the drive circuitry to receive an electrical signal from the drive circuitry. The drive member is
10 configured so that a free end is displaced relative to the substrate on receipt of the electrical signal. A motion-transmitting member is fast with the free end of the drive member so that the motion-transmitting member is displaced together with the free end. An elongate liquid displacement member is fast at one end with the motion-transmitting member and extends into the nozzle chamber to be displaced together with the motion-transmitting member to eject liquid from the ejection port.